

## CLAIMS

1. A jig for producing capacitors, which is used for forming a semiconductor layer by means of energization on two or more electric conductors each having formed on the surface thereof a dielectric layer, the jig comprising two or more current ejection-type constant current sources each having an output electrically connected in series with a connection terminal for the electric conductor.

2. A jig for producing capacitors, which is used for forming a dielectric layer and a semiconductor layer by means of energization on two or more electric conductors, wherein the jig comprises diodes each having a cathode connected with each connection terminal of the electric conductors and each having an anode electrically connected to each other, and two or more current ejection-type constant current sources each having an output electrically connected with a connection terminal for the electric conductor.

3. The jig for producing capacitors as claimed in claim 1 or 2, wherein the current ejection-type constant current sources are constituted by two or more current regulating diodes with respective anodes being electrically connected and each cathode serving as an output.

4. The jig for producing capacitors as claimed in claim 1 or 2, wherein the connection terminal for the electric conductor and the output of the current ejection-type constant current source are electrically connected through a cable.

5. The jig for producing capacitors as claimed in claim 2 or 3, wherein the jig comprises a terminal to which respective anodes of the current regulating diodes are electrically  
5 connected.

6. The jig for producing capacitors as claimed in claim 1 or 4, wherein the jig further comprises diodes with each cathode being connected to the connection terminal of each  
10 electric conductor and comprises a terminal to which respective anodes of the diodes are electrically connected.

7. The jig for producing capacitors as claimed in claim 1, 2, 4 or 6, wherein the connection terminal for the electric  
15 conductor has a socket structure.

8. The jig for producing capacitors as claimed in claim 1, 2, 4 or 6, wherein the connection terminal for the electric conductor is a metal sheet.  
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9. The jig for producing capacitors as claimed in claim 1, 2, 4 or 6,, wherein the connection terminal for the electric conductor is a foil-like metal material formed by means of printing.  
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10. The jig for producing capacitors as claimed in claim 2, 8 or 9, wherein the connection terminal for the electric conductor has a comb shape.

30 11. A method for producing a capacitor, comprising using the jig for producing capacitors described in any one of claims 1

to 10.

12. A method for producing a capacitor, comprising using, as one part electrode, an electric conductor having formed on the surface thereof a dielectric layer, and providing the other electrode by forming a semiconductor layer by means of energization, wherein energization is performed by using a constant current source.

13. The method for producing a capacitor as claimed in claim 12, wherein the constant current source is constituted by a current regulating diode.

14. The method for producing a capacitor as claimed in claim 11, wherein the electric conductor having thereon a dielectric layer and being connected to each connection terminal for electric conductor of the jig for producing capacitors is dipped in a semiconductor layer-forming solution and the semiconductor layer is formed by means of energization using the electric conductor side as anode and using an electrode provided in the semiconductor layer-forming solution as cathode.

15. The method for producing a capacitor as claimed in claim 11, wherein the formation of the dielectric layer on the surface of the electric conductor and the formation of the semiconductor layer are performed by using the same jig for producing capacitors.

16. A capacitor group produced by using the method as claimed in any one of claims 11 to 15.